Book Reviews.

The Nervous System and Its Diseases. A Practical Treatise on Neurology for the Use of Physicians and students. By Charles K. Mills, M. D., Professor of Mental Diseases and of Medical Jurisprudence in the University of Pennsylvania, etc.

Diseases of the Brain and Cranial Nerves With a General Introduction on the Study and Treatment of Nervous Diseases. With 459 illustrations. J. B. Lippincott Co. Philadelphia, 1898.

The author has been known, here and abroad, as one of the ablest among American neurologists. His scientific work has always been characterized by exceeding thoroughness and sound judgment. It was, therefore, a foregone conclusion that a book from Dr. Mills' pen would be distinguished by these same high qualities; but, even so, it came as a surprise to us to find that it is altogether the most ambitious effort in the line of neurological book-making. It exceeds in size the corresponding volume of Gowers and the monograph of Von Monakow, and in excellence of its contents, we hasten to add, it is surely the equal of either of them.

Of its 1,056 pages, 256 are devoted to a general Introduction to diseases of the nervous system, and the remaining (nearly 800 pages) to diseases of the brain and of the cranial nerves. We do not see why the author and publishers have not called this "Volume 1," since it is to be followed by another, "which shall include the remaining diseases of the nervous system, insanity, and the medical jurisprudence of both nervous and mental diseases."

The first chapter is called (modestly) a sketch of the nervous system; it contains, in fact, a sufficient account of the development and of the architecture of the nervous system. The embryological data will be particularly welcome to English-speaking readers, for they have been omitted too often from English text-books. The statements made are accurate, and, as far as it is at all possible, illustrations have been utilized to make the subject matter clear to the student. But it is to be feared that the student will not be grateful to Dr. Mills for the introduction of the new cerebral terminology of Wilder and Gage. While recognizing the full merits of this new nomenclature, and appreciating the benefits conferred upon the comparative anatomist and the comparative embryologist, the truth is, the student of neurology does not need it. He can get along well enough with the old terms. The prosocoele, the mesocoele, the epicoele, the metacoele, and all the other "coeles," are not a great advance upon the good, old-fashioned designations for the ventricles; nor does one take kindly to the various "mononyms" (the translation of this term is found in the foot-note on page 47). "Postoblongata" is not particularly euphonious, nor in keeping with the spirit of the language, and it will be a long while before "Metapore" eclipses the "foramen of Magendie." Life is proverbially short, and neurologists care less, at present, about the cavities and holes of the brain (the "coeles" and the "pores") than they do about tracts and cells; and since Van Gehuchten has recently blessed us with "tautomeral," "heteromeral" and "hecatomeral" cells, we shall be kept busy enough with these. Mills has evidently felt some hesitation in introducing a section on nomenclature, and we find that in the middle of the book he himself prefers to speak of "lesions of the ventricles," and not of the "coeles." We have no doubt that in the course of time some of these names will be adopted by general consent; but it will be well along in the next century before the system, as a whole, will come into use. It has been suggested that children should begin the study of brain anatomy. The plan is a good one with reference to this nomenclature; the only way to acquire it is to acquire it early in life, when the cortical cells are ready for the reception of any and all auditory impressions.

In the section on general architecture and physiology of the brain, the sensory tract is mapped out with great detail. Comparative tables like the one on page 105 add greatly to the value of this treatise. The little that is known of the chemistry of the brain and of the chemical processes accompanying nervous action is stated clearly. Altogether this first chapter bears testimony to the author's scholarly attainments.

The second chapter opens with a brief consideration of the general pathology and etiology of nervous diseases. These are included under a few general heads, such as, Developmental Malformations; Inflammations; Degenerations; Tumors and Adventitious Products; Disease of Blood-vessels; Vascular Disturbances; and Functional Disorders. The remarks made under each heading help to establish general principles of neuro-pathology, of which our physicians and students are so much in need. Speaking of degeneration, Mills claims "that primary degeneration may be due to embryonal arrest, or it may be infectious or toxic." The first half of this statement is in keeping with views recently expressed by the present writer, and embodies a fact that is often disregarded. Inflammation is described either as an exudative (serous, fibrinous or purulent), or as a proliferative process, the latter being dependent upon syphilis and other infectious diseases.

The etiology of nervous diseases is considered very fully, to the inclusions of seasonal influences and other Philadelphia specialties. It does not, however, appear to be the season alone which has this curious influence in developing infectious diseases in those predisposed by neuropathic constitutions; for we learn that the tone of the nervous system becomes lowered "in the spring, as the result of severe and prolonged labor" (which is not a peculiarity of the seasons), "or as the effect of cold and exposure." In passing, it may be of interest to note that in New York chorea, for instance, according to the statistics of several clinics, begins as often in August as in the spring months. The consideration of the microbic origin of nervous diseases, and the relation of the infectious processes to them, is thoroughly in accord with recent doctrines. The symptomatology and methods of investigations in nervous diseases are discussed in concise form within the compass of 36 pages, and we fail to find any serious omissions. In view of this, electricity is treated too liberally, being spread over 31 pages. Yet, these are matters of which too much should not be made. Moreover, 47 pages are devoted to general therapeutics. How thoroughly "thumbed" these pages will be, filled as they are with an account of almost every therapeutic agent ever recommended, with a capital table of the "untoward effects of some of the more potent drugs," with innumerable formulæ, with a recommendation of Nuclein Therapy, and with a cautious mention (fortunately not an endorsement) of Cerebrin and "Testicular Therapy." The "table of doses of the potent and newer drugs used in neurological practice" is invaluable, and we record with pleasure that in a foot-note the author does full justice to the late Dr. Sequin's work in this especial field.

With Chapter III. begins the description of the various diseases of the brain. The arrangement is novel in many respects. Diseases of the membranes are discussed, together with those of the sinuses and the veins of the brain, and the chapter closes with an account of encephalic malformations and aberrations, including chronic hydrocephalus. Tubercular and cerebro-spinal meningitis are discussed under the heading of Lepto-Meningitis, where they properly belong. The bacterial origin of the various forms is given due weight. In the treatment of meningitis Mills is inclined, on the whole, to be conservative; "Lanphear, Keen and Senn have advocated the surgical treatment of tubercular lepto-meningitis." But, does Dr. Mills recommend it?

The next chapter is one of the best in the book. The minute anatomy of the cortex precedes the discussion of cortical localization, and this is followed by a study of the lesions and diseases of the larger ganglia, by an account of cranio-cerebral topography, and by a complete statement of the manner in which a post-mortem examination should be made, in order to verify the exact site of a lesion. In discussing cortical localization, Mills, naturally enough, adheres to his own well-known views regarding an independent sensory area, but makes reference to the views of his opponents. He also decides that the evidence is, on the whole, in favor of setting apart a special naming centre, and he would place it in the third temporal convolution. The encyclopedic character of the book is brought out in this chapter by the publication of many facts which the student of neurology is anxious to have, but would not know where else to find; such as the average brain weight of the insane, the recorded "brain weights of eminent men," and the like.

Encephalic circulation and the vascular disturbances and diseases of the brain are described in a masterly manner in Chapter V. It is interesting to compare the table of differential diagnosis between hemorrhage, thrombosis and embolism, as given by Mills, with one published almost simultaneously by von Monakow. In the main they agree. Mills lays stress upon the pupillary symptoms; Von Monakow scarcely mentions them; but the latter refers in greater detail to the psychic phenomena preceding and following the attack, which Mills treats less elaborately.

The section on tumors of the brain, encephalitis, cerebral paralysis of children and aphasia show the author's intimate acquaintance with each special subject. The various forms of encephalitis are given with as much detail as the present state of our knowledge permits; but in this, as in almost all other subjects, the reader will find that the author has kept a close watch on medical progress, without exhibiting an undue fondness for theories that have not been sufficiently substantiated. In writing upon aphasia, Mills is actuated by a spirit of fairness to those who do not accept his frequently expressed views. He reiterates his belief in a special motor graphic center, but, at the same time, does full justice to the views of Dejerine, Wernicke, and others. The clinical relations of aphasia to other paralytic phenomena are brought out more distinctly than by the majority of writers on aphasia.

In Chapters VII. to X. the affections of the special senses are described in connection with all other cranial nerve diseases. We say advisedly that we know of no other book in any language in which this part of the subject has been treated with equal thoroughness. Diseases of the auditory and optic nerves are explained in such a way that, we trust, oculists and aurists will regard this part of Mills' treatise as a work especially designed for them. We commend once more the satisfactory manner in which the author has described these diseases always prefacing the description of disease by a thorough account of the anatomy of the peripheral sense organ or nerve and its central connections.

But there are other features about this work which will stamp it as one of unusual excellence. The style is terse and clear throughout. The illustrations are good and abundant, and there is a bibliographic index which might well be called "The Index Medicus" for neurologists. We realize the stupendous labor bestowed upon the preparation of this work, and it is evidently planned and executed with the utmost deliberation. We rejoice heartily in the publication of this treatise. which will be not only a lasting credit to its author, but will help to place the study of nervous diseases upon a higher plane. We shall await anxiously the appearance of the second volume.

B. SACHS.

THE BULLETIN OF THE OHIO HOSPITAL FOR EPILEPTICS. **Gallipolis**, Ohio, January, 1898.

To Ohio belongs the credit of having been the first State in the Union to establish a special hospital for epileptics. The management shows a progressive spirit in attempting, over and above the mere care and treatment of the inmates, to conjoin with the good work done there scientific investigation as to the causes of epilepsy. It must be through long-continued effort of pathological chemists in well-equipped laboratories that important discoveries will be made, which some day will elucidate the problems of epilepsy and indicate better means of cure than we now possess. We are glad to see that the Ohio institution is fully alive to the opportunities afforded it by the vast material at its disposition. The work of the special pathologist, Dr. Ohlmacher, as presented in this Bulletin, is to be commended for thoroughness and precision. The first forty pages are taken up with the minute details of autopsies upon six patients. He paid especial attention to the condition of the thymus gland in these cases, finding four instances of persistent or enlarged thymus, and makes the relation of thymic hyperplasia to epilepsy the subject of a second article in the same number of the Bulletin. In his conclusions Dr. Ohlmacher says that these morphological anomalies of the thymus observed in his cases of epilepsy, and which have also been noted in thymic asthma, thymic sudden death and possibly exophthalmic goitre, will be found to have something more than an accidental relation. We trust that he will continue his researches in this direction, and that others engaged in similar work will follow up the new clue in the attempt to unravel the secrets of this obscure condition.

Dr. Rutter, the superintendent, devotes a few pages of the Bulletin to "Colony Care of the Epileptic." We are afraid that from the first the management of the Gallipolis institution has not kept in mind the true *Colony* system. Beginning with but 125 acres of land there have been added only 125 acres since—an acreage too small for the number of patients already in the hospital. The plan adopted was originally that of a pavilion-asylum—not a colony at all. It consisted of stone buildings, each for fifty patients, symmetrically arranged about an administration building and connected by tunnels with central power house, kitchen and bakery, and flanked by two congregate dining rooms, one for each sex. The group was planned for 1,000 patients. While there has been some modification of the original plan, Dr. Rutter's description reads as follows:

"The buildings will then consist of eleven residence *cottages* with from fifty to seventy-six beds each; one laundry-*cottage* for seventy-five resident patients; one *cottage* for the insane with a capacity of two hundred," etc.

The italicization of the word "cottage" by the reviewer is merely to indicate an apparently wrong use of the word. Surely one cannot designate as cottages buildings accommodating from fifty to two hun-